

| | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 5' | CAG | AAA | CAG | AAC | TGC | CTG | TGA | CAG | AAT | AAG | AGA | CAA | GCA | AGG | CTT | GGA | ATC | TGA |
| | 9 | 18 | 27 | 36 | 45 | | | | | | | | | | | | | |
| GAG | CAA | GCA | AAG | AGA | GTG | GAA | ATT | TAC | AGC | TGC | CTT | ATC | ATT | CCA | TAT | TGG | AAG | |
| | 63 | 72 | 81 | 90 | 99 | | | | | | | | | | | | | |
| AAG | AGA | TTT | CTA | CAC | ATG | AAA | AAA | ATG | CCT | TTG | TTT | AGT | AAA | TCA | CAC | AAA | AT | |
| | | | M | K | M | P | M | P | L | F | S | K | S | H | K | N | | |
| | 117 | 126 | 135 | 144 | 153 | | | | | | | | | | | | 162 | |
| | 171 | 180 | 189 | 198 | 207 | | | | | | | | | | | | 216 | |
| CCA | GCA | GAA | ATT | GTG | AAA | ATC | CTG | AAA | GAC | AAT | TTG | GCC | ATT | TTG | GAA | AAG | CAA | |
| P | A | E | I | V | K | I | L | K | D | N | L | A | I | L | E | K | Q | |
| | 225 | 234 | 243 | 252 | 261 | | | | | | | | | | | | | |
| GAC | AAA | AAG | ACA | GAC | AAG | GCT | TCA | GAA | GAA | GTG | TCT | AAA | TCA | CTG | CAA | GCA | ATG | |
| D | K | K | T | D | K | A | S | E | E | V | S | K | S | L | Q | A | M | |
| | 279 | 288 | 297 | 306 | 315 | | | | | | | | | | | | 270 | |
| AAA | GAA | ATT | CTG | TGT | GGT | ACA | AAC | GAG | AAA | GAA | CCC | CCG | ACA | GAA | GCA | GTG | GCT | |
| K | E | I | L | C | G | T | N | E | K | E | P | P | T | E | A | V | A | |
| | 333 | 342 | 351 | 360 | 369 | | | | | | | | | | | | 324 | |
| CAG | CTA | GCA | CAA | GAA | CTC | TAC | AGC | AGT | GGC | CTG | CTG | GTG | ACA | CTG | ATA | GCT | GAC | |
| Q | L | A | Q | E | L | Y | S | S | G | L | L | V | T | L | I | A | D | |

FIGURE 1A

PROTEIN ALIGNMENT

| | | | | | |
|-------------------------------------|---|-------------------------|-------------|-----|-----|
| 387 | 396 | 405 | 414 | 423 | 432 |
| CTG CAG CTG ATA GAC | GAG GGA AAA AAA | GAT GTG ACC CAG | TAT AAC AAC | | |
| L Q L I D F E G K K | D V T | Q I F N N | | | |
| 441 | 450 | 459 | 468 | 477 | 486 |
| ATC TTG AGA AGA CAG | ATA GGC ACT CGG AGT CCT ACT | GTG GAG TAT ATT AGT GCT | | | |
| I L R R Q I G T R S | P T V | E Y I S A | | | |
| 495 | 504 | 513 | 522 | 531 | 540 |
| CAT CCT CAT ATC CTG | TTT ATG CTC CTC AAA GGA TAT GAA GCC CCA CAG ATT GCC | | | | |
| H P H I L F M L L K G Y E A P Q I A | | | | | |
| 549 | 558 | 567 | 576 | 585 | 594 |
| TTA CGT TGT GGG ATT | ATG CTG AGA GAA TGT ATT CGA CAT GAA CCA CTT GCC AAA | | | | |
| L R C G I M L R E C I R H E P L A K | | | | | |
| 603 | 612 | 621 | 630 | 639 | 648 |
| ATC ATC CTC TTT TCT | ATT CAA TTC AGA GAT TTC TTT AAG TAC GTG GAG TTG TCA | | | | |
| I I L F S N Q F R D F F K Y V E L S | | | | | |
| 657 | 666 | 675 | 684 | 693 | 702 |
| ACA TTT GAT ATT GCT | TCA GAT GCC TTT GCT ACT TTC AAG GAT TTA CTA ACC AGA | | | | |
| T F D I A S D A F A T F K D L L T R | | | | | |
| 711 | 720 | 729 | 738 | 747 | 756 |
| CAT AAA GTG TTG | GTA GCA GAC TTC TTA GAA CAA ATT TAC GAC ACT ATT TTT GAA | | | | |
| H K V L V A D F L E Q N Y D T I F E | | | | | |

FIGURE 1B

PROSTATE DISEASE

| | | | | | |
|---|------|------|------|------|------|
| 765 | 774 | 783 | 792 | 801 | 810 |
| GAC TAT GAG AAA TTG CTT CAG TCT GAG AAT TAT GTT ACT AAG AGA CAG TCT TTA | | | | | |
| D Y E K L L Q S E N Y V T K R Q S L | | | | | |
| 819 | 828 | 837 | 846 | 855 | 864 |
| AAG CTG CTA GGG GAG CTG ATC CTG GAC CGT AAC TTT GCC ATC ATG ACA AAG | | | | | |
| K L L G E L I L D R H N F A I M T K | | | | | |
| 873 | 882 | 891 | 900 | 909 | 918 |
| TAT ATC AGC AAG CCG GAG AAC CTG AAA CTC ATG ATG AAC CTC CTT CGG GAT AAA | | | | | |
| Y I S K P E N L K L M N L R D K | | | | | |
| 927 | 936 | 945 | 954 | 963 | 972 |
| AGT CCC AAC ATC CAG TTT GAA GCC TTT CAT GTT TTT AAG GTG TTT GTG GCC AGT | | | | | |
| S P N I Q F E A F H V F K V F V A S | | | | | |
| 981 | 990 | 999 | 1008 | 1017 | 1026 |
| CCT CAC AAA ACA CAG CCT ATT GTG GAG ATC CTG TTA AAA AAT CAG CCC AAA CTC | | | | | |
| P H K T Q P I V E I L L K N Q P K L | | | | | |
| 1035 | 1044 | 1053 | 1062 | 1071 | 1080 |
| ATT GAG TTT CTG AGC AGC TTC CAA AAA GAA AGG ACG GAT GAT GAG CAG TTC GCT | | | | | |
| I E F L S S F Q K E R T D D E Q F A | | | | | |
| 1089 | 1098 | 1107 | 1116 | 1125 | 1134 |
| GAC GAG AAG AAC TAC TTG ATT AAA CAG ATC CGA GAC TTG AAG AAA ACG GCC CCT | | | | | |
| D E K N Y L I K Q I R D L K T A P | | | | | |

FIGURE 1C

1143 TGA AGA GCT CCC CGG CCC CTG TCA CAG TCA GTC TCA TTT GTC CAG TTT GTA
1152 1161 1170 1179 1188
CAG TGT GTC ATT TCA GAA AGT CAT CAT TCT TGG GAA GAC TTT GGA GGT GCC TAT
1197 1206 1215 1224 1233 1242
1251 TTT TTC TGC TGT AAT TGT TCT GGG TAG ATG GAG TAT AAA CAT TTG AAT GGA AAA
1260 1269 1278 1287 1296
AAA TTA ACC TAG AAT AAT ATA TTC ATT TTA GTC AAA AAA AAA AAA AAA 3'

FIGURE 1D

| | | |
|-----|---|----------|
| 1 | N K K M P L F S K S H K N P A E I V K I L K D N L A I L E K - - - - - | hCBP |
| 1 | N P - F P - F G K S H K S P A D I V K N L K E S M A V L E K - - - - - | 9262934 |
| 1 | N - - P L F G K S Q K S P V E L V K S L K E A I N A L E A - - - - - | 91794137 |
| 1 | N P L - - L F G K S H K S P A D V K T L R E V L T I L D K L P P K L D K D G | g1255838 |
| 31 | Q D - - K K T D K A S E E V S K S L Q A M K E I L C G T N E K E P P T E - A V | hCBP |
| 29 | Q D I S D K K A E K A T E E V S K N L V A M K E P Q T E - A V | 9262934 |
| 28 | - - G D R K V E K A Q E D V S K N L V S I T K N M L H G S S D A E P P A D Y V V | 91794137 |
| 39 | N I Q S D K K Y D K A L D E V S K N V A M I K S F I Y G N D S A E P S S E H V V | g1255838 |
| 67 | - - A Q L A Q E L Y S S G L L V T L I A D L Q L I D F E G K K D V T Q I F N N I | hCBP |
| 68 | - - A Q L A Q E L Y N S G L L G T L V A D L Q L I D F E G K K D V A Q I F N N I | 9262934 |
| 65 | - - A Q L S Q E L Y N S N L L L T I Q N L H R I D F E G K K H V A L I F N N I | 91794137 |
| 79 | Q V A Q L A Q E V Y N A N T I L P M L I K M L P K F E F E C K K D V G Q I F N N I | g1255838 |
| 105 | L R Q I G T R S P T V E Y I S A H P H I L F M L L K G Y E A - P Q I A L R C | hCBP |
| 106 | L R R Q I G T R P T V E Y I C T Q Q N I L F M L L K G Y E S - P E I A L N C | 9262934 |
| 103 | L R R Q I G T R S P T V E Y I C T K P E I L F T L M A G Y E D A H P E I A L N S | 91794137 |
| 119 | L R R Q I G T R S P T V E Y I L G A R P E I L I Q L V Q G Y - S V P D I A L T C | g1255838 |
| 143 | G I M L R E C I R H E P L A K I I L F S N Q F R D F F K Y V E L S T F D I A S D | hCBP |
| 144 | G I M L R E C I R H E P L A K I I L F S N Q F Y D F R Y V E M S T F D I A S D | 9262934 |
| 143 | G T M L R E C A R Y E A L A K I M L H S D E F F K F R Y V E V S T F D I A S D | 91794137 |
| 157 | G L M L R E S I R H D H L A K I I L Y S D V F Y T F F L Y V Q S E V F D I S S D | g1255838 |

FIGURE 2A

| | | | |
|-----|---|---------------------|---------|
| 183 | A F A T F K D L L T R H K V L V A D F L E Q N Y D T I F E D | - Y E K L L Q S E N | hCBP |
| 184 | A F A T E K D L L T R H K [L] S A E F F L E Q H Y D R F F S E | - Y E K L L H S E N | 9262934 |
| 183 | A F S T F K E L L T R H K [L] C A E F F L D A N Y D K F F S Q H Y Q R L L N S E N | 91794137 | |
| 197 | A F S T F K E L L T R H K [L] I A E F F L D S N Y D T F F A Q - Y Q N L L N S K N | 91255838 | |
| 222 | Y V T K R Q S L K L L G E L I L D R H N F A I M T K Y I S K P E N L K L M M N L | hCBP | |
| 223 | Y V T K R Q S L K L L G E L I L D R H N F T I M T K Y I S K P E N L K L M M N L | 9262934 | |
| 223 | Y V T R Q S L K L L G E L I L D R H N F T V M T R Y I S E P E N L K L M M N M | 91794137 | |
| 236 | Y V T R Q S L K L L G E L I L D R H N F N T M T K Y I S N P D N L R L M M N E L | 91255838 | |
| 262 | L R D K S P N I Q F E A F H V F F V A S P H K T Q P I V E I L K N Q P K L | hCBP | |
| 263 | L R D K S P N I Q F E A F H V F F V A N P N K T Q P I L D I L L K N Q P T K L | 9262934 | |
| 263 | L K E K S R N I Q F E A F H V F F V A N P N K P K P I L D I L L R N Q T K L | 91794137 | |
| 276 | L R D K S P N I Q F E A F H V F F V A N P N K P K P I S D I L N R N R E K L | 91255838 | |
| 302 | I E F L S S F Q K E R T D D E Q F A D E K N Y L I K Q I D L K K T A - - - | hCBP | |
| 303 | I E F L S K F Q N D R T E D E Q F N D E K T Y L V K Q I R N L K R T A Q O E - | 9262934 | |
| 303 | V D F F L T N F H T D R S E D E Q F N D E K A Y L I K Q I K E L K P L P - E - | 91794137 | |
| 316 | V E F F L S E F H N D R T D D E Q F N D E K A Y L I K Q I Q E M K S S P K E A K K | 91255838 | |
| 337 | - | hCBP | |
| 341 | - | 9262934 | |
| 339 | - | 91794137 | |
| 336 | P K S K E D E N Q E P A G P S E G P S T S Q | 91255838 | |

FIGURE 2B